

Installation Instructions

dB4 MAX IS NOT WARRANTED AS A MOISTURE BARRIER.

Preparation:

- o **NOTE:** Acoustic sealant shall be used at base of stud track of demising walls prior to installation of underlayment, where necessary
- o When to install:
 - After 100% “dried in” (all windows and doors installed)
 - Preferably, after drywall installation
 - Finish floor shall be installed within 2 weeks, if possible
 - Underlayment shall be protected from heavy wear, including use of stilts, hand-trucks, heavy equipment, etc.

Concrete Subfloor

1. The slab must be of good quality, standard density concrete with low water to cement ratios consistent with placing and finishing requirements.
2. It shall have a maximum slump of 4”, a minimum compressive strength of 3500 psi, and following the recommendations of ACI Standard 302.1R for Class 2 or Class 4 floors and the Portland Cement Association’s recommendations for slabs on ground.
3. The concrete slab must be dry, clean, smooth, structurally sound, and free of foreign materials that might prevent an adhesive bond as described in ASTM F710 “Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.”
4. For grade- or below-grade concrete, refer to detailed instructions for vapor retarder.

NOTE: Do not use spray-on curing compounds because they reduce the drying rate of concrete and can interfere with the adhesive bond.

5. Before installation of the finished flooring, moisture, alkali, and bond testing must be conducted.
6. Moisture testing must be performed in accordance with ASTM F2170 “Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes” (preferred method) or in accordance with ASTM F1869 “Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.”
7. The concrete must be dry with moisture emission rates that do not exceed 3 lbs. per 1000sf in 24 hours.
8. The surface of the concrete must have a pH of 9 or less.
9. Bond testing must be completed to determine compatibility of the adhesives to the concrete slab.
10. Above-grade concrete is usually protected from most sources of moisture except the moisture initially in the mix and water vapor in the atmosphere. As with concrete

placed on and below grade, above-grade concrete must be kept damp during the curing process to permit hydration to occur.

11. Floors on metal decks or above-grade structural concrete floors must be dried and must meet the same requirements as slabs on grade.

Gypsum concrete surface preparation

1. Surfaces to receive dB4-MAX shall be clean and cured per the gypsum concrete manufacturers curing instructions.

Wood subfloor surface preparation (or Cement Board)

1. Surfaces to receive dB4-Max shall be broom clean and smooth with no protruding fasteners.
2. If not adequately smooth, all protrusions greater than 1/16” shall be scraped from surface, as they will telegraph through underlayment.
3. Acclimate the rolls of dB4 MAX for a minimum of 24 hours at temperatures 60o F or greater to reduce material stiffness when unrolling.

IMPORTANT NOTE: Planks should be installed perpendicular (90 degrees) to the dB4 MAX underlayment pattern;

PLACE THE BLACK SIDE DOWN ONTO THE SUB-FLOOR FOR:

- Ceramic Tile

PLACE THE BLACK SIDE UP ONTO THE SUB-FLOOR FOR:

- Glue down engineered wood or hardwood floors
- Nail down engineered wood or hardwood floors
- Floating engineered wood or hardwood floors
- Glue down carpet tiles
- All others: LVT, VCT, laminates

1. Starting in one corner of the room, unroll dB4 MAX flush with the existing wall and cut to required length. Use a straight edge and cut with a utility knife.
 - a. dB4 MAX shall run in the gap under the drywall (BEYOND the baseboard) and can butt against the baseplate and/or stud track. The dB4 MAX underlayment does not expand/contract with thermal changes.
2. Roll out additional dB4 MAX rolls, tightly butting the side edges to one another. Do not overlap seams. Butt joints shall not have openings exceeding 1/16” (this will allow additional sound to pass through)

NOTE: Sheet goods do not need to be unrolled, and may be placed directly in place.

3. End joints should be staggered (See Detail 1)
4. (OPTIONAL) Although dB4 MAX may be used as a free-floating underlayment, dB4 MAX may be secured to the subfloor using the following approved adhesives (full list

in Appendix A). Follow manufacturer's instructions for application of adhesive.

- a. Spray-On: XL Stix Essential
 - i. NOTE: Pressure Sensitive Adhesives (PSAs) must be allowed to cure and tack prior to installation of dB4 Underlayment
 - b. Trowel-On: XL Stix 5300, Armstrong S235, or other Premium Vinyl Floor Adhesives (must be polyurethane-based)
 - i. Commercial Alternative: Stick N Stay (from large retailers)
 - ii. NOTE: may be rolled on by large nap roller
 - iii. NOTE: Contact underlayment manufacturer for approval on other adhesive types
 - c. Do NOT use water-based adhesive
 - d. To assure ideal level-floor finish, weighted roller is suggested. Curling and bubbling edges may require re-application adhesive. Wood sub-floors may use mechanical fasteners.
5. The seams should be taped with Dri-Seal or an approved impermeable tape. Tape should be rolled out to ensure no bubbles or wrinkles exist.
- a. Dri-Seal: Poly-propylene tape with acrylic adhesive, with thickness greater than 12 mils, impermeable rating ($\leq .04$ perms)
 - b. Taping is not required for hardwood or laminate applications if on wood sub-floor
6. dB4 MAX is easily cut to fit around irregular objects and columns.

Installation of Hardwood Floors

Nail down, glue down, or free floating

IMPORTANT NOTE: Planks should be installed perpendicular (90 degrees) to the dB4 MAX underlayment pattern.

1. Acclimate the floor covering at the installation site per the flooring manufacturer's requirements. The floor covering manufacturer's recommended installation guidelines must be followed using recommended pressure sensitive or premium vinyl adhesives and application directions.
2. Apply the floor covering manufacturer's recommended adhesives (if glue down hardwood) directly onto the dB4 MAX, following flooring manufacturer's application instructions.
3. Ensure the seams of dB4 MAX underlayment are offset from the seams of the wood flooring.
4. Hardwood should NOT contact drywall or base plate directly. Where locked under baseboard, acoustic sealant should be used (as specified in Appendix B). Typical finish with 1/8" bead.

Installation of Carpet Tile

IMPORTANT NOTE: For glue down carpet tiles, place the black side facing UP onto the sub-floor.

1. Using premium, polyurethane based, vinyl tile adhesive, glue the dB4 MAX to the subfloor.
2. Acclimate the floor covering at the installation site per the flooring manufacturer's requirements. The floor covering manufacturer's recommended installation guidelines must be followed using recommended pressure sensitive or premium vinyl adhesives and application directions.
3. Apply the floor covering manufacturer's recommended adhesives directly onto the dB4 MAX, following flooring manufacturer's application instructions.
4. Ensure the seams of dB4 MAX underlayment are offset from the seams of the wood flooring.

Installation of Ceramic Tile for Light Commercial Installations (Public Hallways and Lobbies)

IMPORTANT NOTE: Ensure that black side of dB4 MAX is facing DOWN.

1. Using premium, polyurethane based, vinyl tile adhesive, glue the dB4 MAX to the subfloor.
2. Cement backer-board or minimum 3/8" plywood is to be adhered directly to dB4; Cement backer-board is recommended but plywood may be used.
3. Backerboard may be fastened with screws where subfloors are wood.
4. Install mortar to backer-board. Follow adhesive manufacturer's instructions; United Plastics recommends a 1/2" x 1/2" square notch trowel for 12"x12" tile. For tile sizes greater than 12" x 12", see tile manufacturer's recommendations.
5. Install tiles per tile manufacturer's instructions.
6. Mortar joints should be no greater than 1/8" in width.
7. Allow mortar to dry 24 hours before grouting. This is important for mortar curing.
8. Grouted floors are to have no foot traffic for the first 24 hours after grouting and only light foot traffic for the next 48 hours. Grout cracking may occur if these instructions are not followed.
9. Mortar and grout continue to cure for up to 30 days.

IMPORTANT NOTE: Any mortar or grout used MUST be polymer fortified.

Recommended mortars & grouts follow:

- o Mortar: Mapei Ultraflex 2 or Mapei Porcelain Tile Mortar. Custom Building Products Flexbond Mortar will not meet these requirements.
- o Grout: Mapei Flex Color CQ is preferred due to its high polymer content for crack resistance. Flexbond grouts are not approved.

Installation of Ceramic Tile for Residential Installations

IMPORTANT NOTE: Ensure that black side of dB4 Max is facing DOWN

1. Using pressure sensitive vinyl floor adhesive, glue the dB4 MAX to the subfloor.
2. Install mortar to dB4 MAX. Follow adhesive manufacturer's instructions. United Plastics recommends a 1/2" x 1/2" square notch trowel for 12"x12" tile. For tile sizes greater than 12" x 12", see tile manufacturer's recommendations.
3. Install tiles per tile manufacturer's instructions.
4. Mortar joints should be no greater than 1/8" in width.
5. Allow mortar to dry 48 hours before grouting. This is important for mortar curing.
6. Grouted floors are to have no foot traffic for the first 24 after grouting and only light foot traffic for the next 48 hours. Grout cracking may occur if these instructions are not followed.
7. Mortar and grout continue to cure for up to 30 days.

IMPORTANT NOTE: Any mortar or grout used MUST be polymer fortified.

Recommended mortars & grouts follow:

- o Mortar: Mapei Ultraflex 2 or Mapei Porcelain Tile Mortar. Custom Building Products Flexbond Mortar will not meet these requirements.
- o Grout: Mapei Flex Color CQ is required due to its high polymer content for crack resistance.

Storage Requirements

Should be stored in a dry environment. May be stored in temperatures ranging from 0oF to +110oF, but should be allowed to acclimate prior to installation. If material stiffens, it may be softened more rapidly using a heat gun.